Biology

This course encourages students to:
• develop essential knowledge and understanding of different areas of the subject and how they relate to each other
• develop and demonstrate a deep appreciation of the skills, knowledge and understanding of scientific methods
• develop competence and confidence in a variety of practical, mathematical and problem solving skills
• develop their interest in and enthusiasm for the subject, including developing an interest in further study and careers associated with the subject
• understand how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society.

Course Structure & Content

Topics:

1. **Biological Molecules**
2. **Cells**
3. **Organisms exchange substances with their environment**
4. **Genetic information, variation and relationships between organisms**
5. **Energy transfers in and between organisms**
6. **Organisms respond to changes in their internal and external environments**
7. **Genetics, populations, evolution and ecosystems**
8. **The control of gene expression (A-level only) (page 53)**

Paper 1 - Any content from topics 1-4
Written exam - 2 hours [91 marks] - 35% of A Level

Paper 2 - Any content from topics 5-8
Written exam - 2 hours [91 marks] - 35% of A Level

Paper 3 - Any content from topics 1-8
Written exam - 2 hours [78 marks] - 30% of A Level

Entry Requirements

Students would be expected to have achieved at least a grade 6 in Biology or 6/6 in Combined Science. Also, need Grade 6 in Maths.

Progression

Students who study A-level Biology, often go on to study medicine, dentistry, and veterinary science, or biomedical sciences, environmental science, genetics, and pharmacology. It can also complement a PE/Sport qualification for students interested in Sport Science or related courses. It can open up a wide variety of careers such as a research scientist, a laboratory technician, a nurse, a conservation officer, or a science communicator amongst others.